## The Idea of the International Congress on Desert Economy - Dakhla, Morocco.

Think globally, act locally.



Dr. Elouali AAILAL. Professor at the National School of Business and Management, ENCG Dakhla.

Founder and President of <u>the International Congress on Desert Economy - Dakhla. Morocco.</u>

President of the Desert Action Association – Dakhla.

icded2018@gmail.com

The ultimate purpose of The International Congress on Desert Economy - Dakhla, is to be an interdisciplinary scientific research platform on the desert, arid lands, and the Sahara (hot drylands, hyperarid or semi-arid regions, oasis and rural remote areas) economy, management, and development (rural development), in order to contribute effectively to the good governance and in the sustainable development of arid lands worldwide, by attracting and promoting investment opportunities in the Sahara and deserts, and by stimulating meetings between all stakeholders on a global scale: Academics, Professionals, Policy-Makers, Civil society and NGOs..., with a view to fostering cooperation and partnership, among desert countries: Africa and the Gulf States (the MENA and the Sahel...), the United States of America, Australia, China, India, South America..., with the aim of valuing and promoting the desert knowledge and its and conferences' findings and recommendations, and creating a conducive related studies' environment to the exchange of experiences, expertise, trainings, educational practices innovation, around themes related to the desert economy and to the arid lands management, such as Tourism, travel industry and tourism economics; Livestock economics, management, and production; Agriculture, aquaculture, and agricultural economics (rural economics); Economics of water; Renewable energy, energy economics, and energy management; Mining and natural resource management; Transportation and logistics; Fisheries, maritime, sea, and ocean economy; Economics of space (space economy) and space industry; Technology and innovation; Water sports and entertainment, sports economy and sports management; Cultural, tangible and intangible heritage: Biodiversity. wetlands. environment. and nature conservation and management...Thus, each year, an edition will be organized.

This scientific international event comes in the context of Morocco's determined commitment and responsibility towards its African depth. This engagement is dictated by historical, geographical, and cultural links and mainly concretized in Morocco's Southern Provinces, which constitute the link between Morocco and sub-Saharan Africa. Although these provinces are located in the desert, they have made considerable progress in record time, thanks to implementing some specific development strategies adapted to Saharan regions, including the New Development Model for Morocco's Southern Provinces.

The idea of the International Congress on Desert Economy - Dakhla, arose for the first time in the framework of the "Desert Action "association (literally in Arabic "Desert Pioneers"), on February 2017, in Dakhla.

The Desert Action Association is the first Moroccan and African association specialized in Arid Lands, Desert, and Sahara economy development (oases and rural remote areas development), business, and management, then, thanks to an official convention between the National School of Business and Management (ENCG Dakhla) of Dakhla and the Regional Council of the Dakhla Oued Eddahab Region, this agreement provides for the annual co-organization of this Congress.

The Desert Action Association, in Dakhla, was the instigator of the creation of an annual Price named "The Théodore Monod Desert Award", to pay tribute and honor the memory of this exceptional man who devoted his life to scientific research on the desert and arid lands, and to acknowledge his human qualities and his pioneering efforts on desert and Sahara studying and exploring. The idea was to annually award this Prize within the framework of the editions of the International Congress on Desert Economy - Dakhla, to encourage and enhance studies and scientific research on deserts (arid lands, Sahara), in its different aspects: scientific, economic ...

A Sahara Desert Excursion is organized after every edition, as a part of the post-congress program of the International Congress on Desert Economy – Dakhla, This is an opportunity to savor the beauty of the desert of the Dakhla region, and to enjoy the most peaceful and joyful moments in the middle of nowhere, "The Sbita Desert ", with its sandy horizons, adorned by the most amazing desert tree: the Acacia (raddiana), under its refreshing shadows, while listening to some classic tones of the Sahara Desert (Hassani music), you will attend a "desert barbecue" and you will taste the traditional dish of southern provinces: "Rice with camel meat". Of course, this time of entertainment is interrupted by three ritual and special moments, those of the presentation of the famous three cups of "Saharan Tea", prepared under a tent of the desert.

This moment of relaxation and contemplation is not a moment of inactivity, but also an opportunity to combine business with pleasure: Times of exploration, curiosity and popular science. The light will be put on certain phenomena that take place in the desert: Meteorological (precipitation and plants of the desert), geological (formation of dunes), archaeological...Also this will be an occasion to raise awareness for students and high school pupils of astronomy and space field experimentation and simulation in desert, and it will also be a suitable moment to underscore the economic potential of Space industry, the economics of space (space economy), and all space related economic activities that takes place in Deserts, Sahara, and Arid lands.

The International Congress on Desert Economy – Dakhla (ICDED) is annually co-organized by the National School of Business and Management (ENCG) of Dakhla - Morocco, and the Regional Council of the Dakhla Oued Eddahab region.

Note that as every year, this third edition of the International Congress on Desert Economy - Dakhla. was supposed to be organized on the last April 21<sup>st</sup> and 22<sup>nd</sup>, 2020, but due to the current situation related to Covid-19 (Coronavirus), it's rescheduled to the next year on October 20<sup>th</sup> and 21<sup>st</sup>, 2021. Besides the main theme of this third edition entitled "Energy Economics between Deserts and Oceans," it will also be devoted to addressing general issues on the desert (Sahara) economy management and its sustainable development.

Gradually we recognize the incredible benefits of inter-African collaboration (and the enormous cost of the lack of inter-African cooperation) both for Africa itself and for the world.

Thanks to multilateral African and international cooperation, deserts and arid lands across the globe, especially in Africa (The Sahara and the Sahel), with their vast and rich natural maritime seaboards and coastlines, are an open workshop and a scene of substantial and Trans-Saharan megaprojects and infrastructures: The DESERTEC Project (Clean and renewable energy), the Great Green Wall for the Sahara and the Sahel Initiative (Greening the Sahara and combating the desertification), the Trans Africa Pipeline Project (Water), the "Power Africa " Initiative, the "Desert to Power" Initiative, The Morocco - Nigeria Gas Pipeline, The African Continental Free Trade Area AfCFTA (Africa's Silk Road ), The United States of America's Initiative: " Prosper Africa", China's Belt and Road Initiative (China's new silk road and maritime silk road: One Belt One Road OBOR)...Such promising Megaprojects and Initiatives, if fully executed, will undoubtedly contribute to rebirthing Africa into holding its deserved high stature, and will play a pivotal role in keeping up with sustainable development and in ensuring African food security, even more, they will provide abundance in the production for export.

The Possible Africa, where there are all ingredients: Diversity and younger population, richness in natural resources, unique geographical configuration and morphology: Savannah, forests, mountains, lakes, vast coasts, deserts, and the Great Sahara Desert.

The Sahara Desert, instead of being underexploited, it could be an exclusive competitive advantage and the mythical and memorable brand image for Africa, and it may be the ideal place to boot a strong and long term inter-African and international cooperation in the service of humankind.

The targeted sustainable development in arid lands, just like anywhere else, is governed by an environmental transformation that will fundamentally change our lifestyle, as sustainability is its corn stone. Concepts like the green economy or circular economy, the blue or ocean economy, and ecotourism (desert tourism) are all plainly supposed to be renewable energy dependant. Thus, the environmental impact of any human activity, such as, travel and tourism industry, land and maritime transport, shipping and logistics, agricultural and fishing... is a major criterion that will tag the range of receptivity and continuity of these economic activities, in the light of an increasingly environmentally-friendly legal arsenal, with a focus on green finance and cleantech.

As a matter of fact, economic development worldwide is entirely dependent on the interactions between energy and economy systems, where our dependence on clean and renewable energy becomes more and more confirmed. Energy Economics could be defined as a branch of economic studies devoted to quantitatively and qualitatively deciphering our well-being and prosperity in their interaction with energy resources.

According to the International Renewable Energy Agency, by 2050, the overall total investment in the energy system would need to reach USD 110 trillion (around 2% of average annual GDP over this period), the level of extra investments required to set the world on a more climate-friendly path above current plans and policies, is USD 15 trillion. The share of renewables in the world's total final energy consumption has to increase six times faster to match up to agreed climate goals, precisely, the seventh Sustainable Development Goal, which states for ensuring that everyone will be able to have access to affordable, reliable, sustainable and modern energy. For that, international financial flows to developing countries, in support of clean and renewable energy, reached USD 18.6 billion in 2016, almost doubling from USD 9.9 billion in 2010. This trend is likely to increase due to the promising opportunities offered by a steady decline in renewable energy production costs, leading to lower prices.

So far, in some countries, oceans and seas still the primary sources of conventional energy (oil, gas), despite their richness in marine renewable energies (offshore energy): traditional marine renewable energies (ocean wind energy and ocean solar energy), wave energy and tidal energy, as specific forms of marine (ocean) power. Also, knowing that ocean-based renewable energy has not yet achieved the economies of scale necessary for significant cost reductions, but, as oceans and seas cover more than 70 % of the Earth's surface, it's not surprising that a large share of future energy production will probably come from ocean-based renewable energy. To show the potential energy glut, published studies have shown that the ocean wind energy potential is so significant and large enough that it could, theoretically, be used to propel human civilization.

Morocco took up the challenge of increasing green renewable energy production from total renewable energy to 52 % by 2030, initially set at 42 % by 2020. This specific achievement becomes a reality thanks to the adoption of an ambitious energy strategy, including generating renewable energies in Moroccan deserts: The Solar Complex (Noor) in Ouarzazate, the largest wind farm in Africa located in the coastal desert of the city of Tarfaya, and last but not least, the project to be implemented in the Sahara of the Dakhla region, aiming to generate renewable and clean energy, from wind, this wind energy will be used in mining the cryptocurrencies based on Blockchain technology, such as the Bitcoin.

This third edition of the International Congress on Desert Economy will be exceptional, in terms of the distinguished participation of eminent scientific and professional personalities and the members of the scientific committee, their prestigious universities, affiliations, and research institutes, their nationalities, and in the importance, the specificity, the actuality, and the relevance of the themes and the subjects that will be discussed.

Concerning the speakers, the scientific committee, and the participants:

- From the United States, the President of the International Arid Lands Consortium, University of Arizona; The Vice President for research at the Desert Research Institute (DRI), Nevada; President-elect of the International Association for Energy Economics (IAEE), Texas; The Director of the Forum on energy modeling. Stanford University. California...

- From the Sahara and Sahel countries: Sudan, Mali, Niger, Mauritania, Chad...there are five Presidents and Deans of universities and Directors:

The President of the University of N'Djaména. Chad; The President of the University Ahmed Baba. President of the Coalition for Higher Education in Mali. Governance Commissioner of the International Network of Higher Education Institutions in the CAMES zone. Mali; The Founder and President of the African Development University. Niger; The Director of the Institute for Desertification and Desert Agriculture Studies. Vice-Dean of Agricultural and Veterinary Studies, University of Khartoum. Sudan; The Director of the Higher Institute of Accounting and Business Administration, ISCAE. Mauritania; The Director-General of the Great Green Wall Agency for the Sahara and the Sahel (GMV). Niger.

## - From Europe:

Spain: The President of the University of Almería (the only desert in Europe is situated in Almería). Spain; the Dean of the Faculty of Economics, Business, and Tourism. University of Las Palmas de Gran Canaria. Spain; The Co-Director of International Relations at UNESCO Chair in Tourism and Sustainable Economic Development. University of Las Palmas de Gran Canaria. Spain; Professor at the Experimental Station of Arid Zones, Almería. The Spanish National Research Council (CSIC). Spain.

France: The Director at MSH Paris-Saclay University. Research Director at the National Institute for Agronomic Research (INRA). President of the European Regional Science Association (ERSA). France; The Founder and the first President of The International Society of Camelid Research and Development. Camelologist at The French Agricultural Research Centre for International Development (CIRAD). France.

Germany: The Chairman and CEO of the Desertec Industrial Initiative. Desert Energy and Honorary President of the European Federation of Energy Traders. Germany; The Director of the International Renewable Energy Research Center. Chairman of the World Renewable Energy Council. Germany; The Director of the Institute for Ethics in Artificial Intelligence. The Technical University of Munich. Germany.

Denmark: The Director of the Sustainable Energy Planning and Management Program. Aalborg University. Denmark; The Director of the Centre for Fisheries and Aquaculture Management and Economics. The University of Southern Denmark. Denmark.

Sweden Professors from the World Maritime University (WMU), Global Ocean Institute, and International Maritime Organization (IMO). Sweden.

Norway: The CEO of Desert Control. Norway.

- From Australia: The CEO of the Arid Lands Environment Center, vice president of the Australian Conservation Foundation, and director of Desert Knowledge Australia (DKA).
- From Canada: The Founders, President, and Directors of the Trans Africa Pipeline Inc (TAP). Institute of Aerospace Studies, University of Toronto.

## - From the MENA region:

There are participants from different universities, institutions from Morocco; The Dean and Vice-President of the University of the United Arab Emirates. United Arab Emirates; The Director-General of the Institute of Arid Regions. Tunisia; Desert Technologies. Saudi Arabia.

## - From Asia:

- From China: The Vice-President of APEC Sustainable Energy Center. Tianjin University. China; Economist at the International Center for Agricultural Research in the Dry Areas (ICARDA). National Project Coordinator of FAO at the Central Asia Desert Initiative (CADI). Uzbekistan.
- From India: The Director of the Trans Africa Pipeline (TAP).
- From Latin America: The Director of the Atacama Desert Center. Faculty of History, Geography, and Political Science. Chile.
- There are also participants from other countries: Senegal, South Africa, United Kingdom, Cameroon...

As for the themes and axes that will be addressed, there are among others:

Trans-Saharan Megaprojects and Initiatives (Trans-African): The DESERTEC Project, Great Green Wall for the Sahara and the Sahel Initiative, The Trans Africa Pipeline Project (Water), The " Power Africa " Initiative; The " Desert to Power " Initiative, The Morocco -Nigeria Gas Pipeline, The African Continental Free Trade Area AfCFTA (Africa's Silk Road), The United States of America's Initiative: " Prosper Africa", China's Belt and Road Initiative (China's new silk road and maritime silk road: One Belt One Road OBOR); International Cooperation on Arid Lands R&D (on deserts and the Sahara); Business, Entrepreneurship, and Investments in Arid Lands (Deserts, Sahara) and Remote Areas: Energy Business, Entrepreneurship in Energy, and Energy Management; Energy, Desertification, Climate Change, and Environment; Offshore Renewable Energy, Marine Wind Energy and Marine Solar Energy (Ocean Power); Wave Energy and Tidal Energy; Low Carbon Energy: Power-to-X and Green Hydrogen (economic, social, and environmental aspects); The Economics of Water, Energy, and Hydraulic Resources Management; Energy in Tourism, Travel, and Hospitality Industry; in Agribusiness, Aquabusiness (aquaculture), and Fisheries Business (halieutic); Energy Food Security in Drylands, Arid Agriculture (Desert Agriculture) and Biosaline Agriculture; Livestock Economics, Management, and Production; Economics of Space (Space Economy) and Space Industry; New Technologies (Artificial Intelligence, Blockchain...) and Energy Efficiency (economic, social, and environmental aspects); Arid Lands (Deserts and the Sahara) Tourism, Travel, and Hospitality Industry...